

NOTES ON THE DISTRIBUTION AND HABITATS OF SOME SPECIES OF BRITISH HEMIPTERA

M. D. EYRE^{1,2}, J. C. WOODWARD² AND M. L. LUFF²

¹*Entomological Monitoring Services (EMS), 13 Manor Grove, Benton, Newcastle upon Tyne NE7 7XQ.* ²*Centre for Life Sciences Modelling, School of Biology, The University, Newcastle upon Tyne NE1 7RU. mickeyre@blueyonder.co.uk*

ABSTRACT

Recent invertebrate survey work has generated a considerable number of Hemiptera records which has increased knowledge of both species distribution and habitat preferences. Records of nationally rare and scarce species are given, together with information on range expansion and habitats for several more common species. Most records were generated in northern England and Scotland, with some from West Yorkshire and the London area. The quality of the available information concerning Hemiptera species distribution is discussed.

INTRODUCTION

With an increase in the amount of invertebrate survey work being carried out for national conservation bodies and as a part of the land development process in the UK, records of a considerable number of Hemiptera species have been generated in the past decade. Our work has been concentrated in northern England but we have information from a number of Scottish areas and from north London. It rapidly became apparent that the habitat and distribution information in the recent literature of the review by Kirby (1992) or in the RECORDER package (Ball, 1997) were, in a number of cases, inaccurate or absent, even for common species.

Information is given below for a number of species for which there are new distribution data or for species recorded from habitats not previously identified. These data have been generated during surveys for a number of invertebrate groups using a mixture of pitfall trapping, suction and sweep sampling. However, it should be understood that there was no attempt to record rare or scarce species. Site national grid references, vice-county numbers and date of sampling are given in the Appendix. Where sites cover a number of 1 km grid squares the numbers in the text are referable to those in the Appendix.

NOTEWORTHY RECORDS

HOMOPTERA

Cercopidae

Cercopis vulnerata Illiger

This obvious species is common in the south of England with its northern limit given in RECORDER as being about the River Tees. It occurred on dunes just to the south of Teesmouth at Coatham but was also recorded from chalk waste heaps at Prudhoe (sites 2 & 3) and from near the confluence of the Rivers North and South Tyne, both in Northumberland.

Cicadellidae

Agallia brachyptera (Boheman)

A northern and eastern nationally scarce species (Kirby, 1992), most previous records were from mainly dry sites with a number from disturbed ground. These conditions prevailed where the species was found on a number of post-industrial sites

such as the chalk heaps at Prudhoe (sites 1, 2 & 3) and on riverine sediments at Dilstonhaugh and near the confluence of the Rivers North and South Tyne, all in Northumberland. It was present on old sand workings at Crawcrook and Stargate in County Durham and there are also records from dune sites along the north-east England coast at Coatham, Druridge Bay and Alnmouth and from more dense, wet grassland at Allerton Bywater in West Yorkshire (Eyre *et al.*, 2003). A further record from Ryton in Tyne & Wear from short dense dry grassland was from pitfall trapping, as were all the other records. The relative under-recording of this species may be a reflection of its ground-dwelling habits.

Ebarrius cognatus (Fieber)

A nationally scarce species of northern England and Scotland recorded from very sparsely vegetated riverbanks (Kirby, 1992). It was recorded from an area of cobbles and pebble sediment with sparse ruderal vegetation by the River Feshie in Speyside.

Eupteryx florida Ribaut

Apparently a species found in southern England and Wales but given as absent from the north in RECORDER, it was found on damp grassland with rank vegetation at Ryton.

Evacanthus acuminatus (Fabricius)

Recorded being from as far north as Yorkshire in RECORDER, there are new records from the chalk heaps at Prudhoe (site 3) and by the River Tweed at St Cuthbert's, both in Northumberland. In addition, it occurred on riverine sediments by the River Tweed next to its confluence with Ettrick Water and at Mertoun, which may constitute new Scottish records.

Graphocraerus ventralis (Fallén)

A species of well-drained sites given as absent from the extreme north of England in RECORDER. We found it on North Gare Sands dune sites to the north of Teesmouth, Co. Durham and on set-aside arable land at Throckley, Northumberland.

Macropsis infuscata (J. Sahlberg)

This species was found on riverine shingle at Beltingham by the River South Tyne in Northumberland. Previous records appear to be from only the southern counties (RECORDER).

Macrosteles fieberi (Edwards)

The Scottish records given for this nationally scarce species in Kirby (1992) are for eastern and northern counties. We recorded it from a dry grass bank near Craigash, just to the north of Glasgow.

Macrosteles scutellata (Boheman)

Another species apparently not recorded north of Yorkshire (RECORDER), it was found on the old sand workings at Stargate and on riverine sediment at Beltingham.

Macrosteles sordipennis (Stål)

A nationally scarce species of saltmarsh sites (Kirby, 1992), apparently with only one Scottish record, from Dumfriesshire, and with an inland record from Co. Durham. We have it from a saltmarsh on Greatham Creek (site 2) in Co. Durham

but the more interesting records were from riverine sediments by the River Carron in north-west Scotland. It was found near Strathcarron, only about 1 km from the coast, and also further up Glen Carron, about 15 km from the coast.

Mocuellus metrius (Flor)

The RECORDER package states that this species occurs in long vegetation in marshes but is not found north of Yorkshire. However, we have found it near the confluence of the North and South Tynes and at Aviemore, Tulchan Lodge and Fochabers by the River Spey in northern Scotland. These sites were well-vegetated riverine sediments, as were sites by the Ale Water, a tributary of the River Tweed, and at Auldgrith by the River Nith where it was also recorded.

Mocydia crocea (Herrich-Schaeffer)

Another species apparently rare or absent further north than southern England and Wales (RECORDER). It was found near the confluence of the two Tynes and on the riverbank at Close House (site 1) and on the old sand workings at Crawcrook and Stargate and the set-aside at Throckley. There are also records from dune sites at Coatham and North Gare Sands and from damp grassland on Prestwick Carr (site 2).

Mocydiopsis parvicauda Ribaut

This species was recorded from an old colliery site at Allerton Bywater, West Yorkshire, even though RECORDER maintains that it is not found north of East Anglia.

Paluda adumbrata (C. Sahlberg)

A species of well-drained sites, such as chalk grassland (Hawes & Stewart, 1997), it is generally found in southern England and is said to be rarer or absent elsewhere (RECORDER). There are, however, records from the dunes at Coatham and from the chalk heaps at Prudhoe (site 2) and it was also found on the old sand workings at Crawcrook and on old pasture at Cockle Park in Northumberland.

Psammotettix frigidus (Boheman)

Kirby (1992) gives only Scottish records for this nationally scarce species, from open grassy sites, and RECORDER also states that it is only found in Scotland, even though Horsfield (1993) recorded it from Pen-y-Ghent, Yorkshire. We have found it in Scotland on the grassy sides of streams draining moorland on the Langholm–Newcastleton SSSI (sites 1, 2 & 3) in the Borders and from riverine shingle by the River Feshie in Speyside and at Incheril in north-west Scotland. It occurred all over the chalk heaps at Prudhoe (sites 1, 2 & 3) and on colliery spoil sites at Marley Hill (sites 1 & 2) and Weetslade in north-east England and at Allerton Bywater (Eyre *et al.*, 2003). There are also records from dune sites at Coatham and Druridge Bay, from the sand site at Stargate as well as from old pasture at Cockle Park.

Psammotettix putoni (Then)

A common species of coastal sites, it was found on riverine shingle at Achnashellach and Coulags in the River Carron catchment in north-west Scotland. It has also been recorded from colliery spoil at Weetslade in Northumberland and from a similar site at Sharlston, West Yorkshire.

Cixiidae

Cixius cambricus China

A nationally scarce species with only one record for England given by Kirby (1992), with a number from Scotland. It was recorded from riverine sediments by the

River Tweed at Horsburgh Ford and near the confluence with the Ettrick Water. There is also a record from open woodland in the Coquet valley in Northumberland at Grasslees Wood. Kirby (1992) postulated that because it is ground-dwelling, it is likely to be under recorded and these three records were all from pitfall trapping.

Delphacidae

Asiraca clavicornis (Fabricius)

This nationally scarce species appears to be relatively common in south-east England with a distribution centred on London and the Thames valley (Stewart, 1999a). There are a considerable number of recent records (Allen, 1999; Jones & Hodge, 1999; Badmin, 2001, 2002; Denton, 2001). A number of the records by Jones & Hodge (1999) were from railway embankments and it was recorded from the sidings at Cricklewood (sites 1 & 2) in 2001.

Calligypona reyi (Fieber)

A rare British species with a Red Data Book (Insufficiently known) conservation designation. Kirby (1992) gives only four confirmed records; old ones (pre-1960) from Norfolk, Suffolk and Dorset and in 1971 and 1973 from the Isle of Wight. It is a species found amongst *Juncus* and *Scirpus* on coastal marshes (RECORDER) and there are a number of more recent records from southern English sites (Kirby *et al.*, 2001). There were abundant *Juncus* tussocks on the wet sand of the old extraction area at Crawcrook, Co. Durham from where this species was found in 1996. This record not only greatly expands the range of *C. reyi* but it also appears to be the first inland record.

Dicranotropis divergens Kirchbaum

There are records for this nationally scarce moorland species from Westmorland and Northumberland and three Welsh counties in Kirby (1992) even though RECORDER asserts that it is found only in Scotland. Cherrill & Sanderson (1994) recorded it from sites in Redesdale (sites 1 & 2) near the Scottish border and we have it from the Scottish side on the Langholm–Newcastle Hills SSSI (site 4). There is another Scottish record from riverine sediments by the River Dulnain in Speyside.

Eurysa lineata (Perris)

Apparently a southern English species and absent from the north (RECORDER), we found it on dunes of the North Gare Sands at Teesmouth.

Stenocranus minutus (Fabricius)

Another common species in the south which is rarer or absent in the north (RECORDER). It was recorded from the Prudhoe chalk heaps (sites 2 & 3), from the dunes at Coatham, the riverbank at Close House (site 2) and the sand workings at Crawcrook.

HETEROPTERA

Coreidae

Bathysolen nubilis (Fallén)

There are a number of recent records for this nationally scarce species with Denton (1998) and Kirby *et al.* (2001) identifying it as spreading in southern England. Nau (1998) found it on an old railway track in Bedfordshire and it was recorded from old railway sidings at Cricklewood, north London (sites 1 & 2) in 2001 and 2002. These were sandy sites with sparse, ruderal vegetation.

Lygaeidae

Drymus pilicornis (Mulsant)

Kirby (1992) states that this nationally scarce species does not occur north of Derbyshire and is usually recorded from calcareous grasslands. However, we found it on colliery spoil at Marley Hill, Co. Durham (site 1) and also on the railway sidings at Cricklewood (site 2) in 2001. Part of these sidings include an area of demolished buildings and there are areas of weathering concrete and masonry providing calcareous habitats.

Drymus pilipes Fieber

Another nationally scarce ground-bug species apparently found no further north than Derbyshire (Kirby, 1992) and found on chalky or sandy sites. It was taken on dune sites either side of Teesmouth at Coatham and on Seaton Sands.

Miridae

Capsus wagneri Remane

There were relatively few recent records for this nationally scarce wetland species in Kirby (1992) but it became obvious that it had been under recorded. Kirby *et al.* (2001) states that there are recent, post-1980, records from Huntingdonshire, Somerset, Middlesex, Northumberland, Sussex, Norfolk, Northamptonshire, Lincolnshire and Dumfriesshire. It was abundant on Prestwick Carr (sites 1 & 2), an area of relict lowland wetland to the north of Newcastle upon Tyne, being found in pitfall traps, yellow pan traps and sweep samples.

Orthotylus fuscescens (Kirschbaum)

A nationally scarce species found on Scots pine in Scotland (Kirby, 1992), it was recorded from pitfall traps on riverine sediment at the confluence of the River Calder with the River Spey near Newtonmore.

Trigonotylus psammaecolor Reuter

Said to occur on sand dunes north to Cumberland and Fifeshire (Kirby, 1992), although RECORDER only gives the southern half of Britain, this nationally scarce mirid was found on the inland sand workings at Crawcrook, Co. Durham.

Pentatomidae

Sciocoris cursitans (Fabricius)

A nationally scarce species of open, dry sites with records only from southern England (Kirby, 1992), there are recent records from dunes in Cornwall (Alexander & Grove, 1991) and chalk grassland in Surrey (Kirby, 1994; Denton, 1997). It was found on the dry, sandy areas of Cricklewood sidings (site 2) in 2002.

Rhopalidae

Stictopleurus punctatonervosus (Goeze)

A bug species rated as extinct by Kirby (1992) with records from Surrey and Sussex but none later than 1870. It is a species of dry, open habitats and it has been found recently on this type of site. Bowdrey (1999) found it at three dry and sparsely vegetated sites in Essex in 1997 and 1998, one from a post-industrial site (Stewart,

1999b). It was also recorded from Bexley in Kent in 1998 and at West Acton and Chelsea in Middlesex in 1999 and 2000 by Jones (2000). These sites included derelict land and an old railway embankment (Stewart, 2001) and it was also recorded from East Sussex in 2001 by P. J. Hodge (Stewart, 2002). It was found on Cricklewood sidings (site 2) in 2002 on an area of open sandy habitat with sparse vegetation. This species appears to be spreading and a possible conduit is likely to be the areas of appropriate habitat adjoining railway lines.

Saldidae

Halosalda lateralis (Fallén)

Apparently absent from the northern English counties (RECORDER), this saltmarsh species was found by Greatham Creek, Co. Durham (site 1).

Scutelleridae

Eurygaster maura (Linnaeus)

RECORDER reports that this grass feeding nationally scarce bug is confined to the calcareous grasslands of the North Downs but Kirby (1992) stated that there were records from dunes and other dry grassland sites. It occurs on dunes in Kent and chalk grassland in Surrey (Denton, 2001; Badmin, 2002) and it was found on the railway sidings at Cricklewood (site 2) in 2001.

DISCUSSION

The records presented above indicate that the knowledge of the distribution of even common Hemiptera species is not especially comprehensive and that far more information on species distribution and habitats is required. The situation is not helped by the generally inaccurate information given in the RECORDER package (Ball, 1997), with an inability to restate the information given in the review of Kirby (1992). Similar deficiencies have been observed with the Coleoptera (Eyre, 1998) and this is a problem given that this package is so widely available and provides the only rapidly accessible information on Hemiptera species.

The generation of so much new distribution data is a result of a more standardised approach to invertebrate survey work. The use of pitfall traps (Luff, 1996) and suction samplers (Stewart & Wright, 1995) has led to the identification of a number of beetle (e.g. Eyre *et al.*, 2001a; Eyre & Luff, 2003) and Auchenorrhyncha assemblages (Eyre *et al.*, 2001b). During these surveys a considerable number of rare and scarce beetle species were recorded (Eyre *et al.*, 1998, 2000), including a number from urban and post-industrial sites (Eyre *et al.*, 2002). A considerable number of the records of the rarer Hemiptera species in this paper were found on sites such as colliery spoil, railway sidings, old sand extraction areas and chalk dumps. These man-made habitats have been neglected in the past and are proving to be valuable invertebrate refugia. Jones (2001) found a number of rare and scarce species on railway embankment sites on the London Underground, with ruderal vegetation. Species of calcareous grasslands and sandy heaths were found on the sidings at Cricklewood and it may be that habitat next to the railway system will prove to have a high invertebrate conservation value.

ACKNOWLEDGEMENTS

The authors would like to thank Alan Stewart and Bernard Nau for help in checking species identifications.

REFERENCES

- Alexander, K.N.A. & Grove, S. J. 1991. Heteroptera recording in Cornwall and Devon during 1989 and 1990. *British Journal of Entomology and Natural History* **4**: 119–121.
- Allen, A. A. 1999. Plant-bugs (Hemiptera) on Woolwich Common, south-east London. *Entomologist's Records & Journal of Variation* **111**: 204.
- Badmin, J. 2001. Hemiptera report. *Bulletin of the Kent Field Club* **46**: 78.
- Badmin, J. 2002. Hemiptera report 2001. *Bulletin of the Kent Field Club* **47**: 89.
- Ball, S. G. (1997) *RECORDER 3.3. A database for site-based, species occurrence records*. Joint Nature Conservation Committee, Peterborough.
- Bowdrey, J. P. 1999. *Stictopleurus punctatonervosus* (Goeze, 1778) (Hem.: Rhopalidae) rediscovered in Britain. *Entomologist's Records & Journal of Variation* **111**: 135–136.
- Cherrill, A. J. & Sanderson, R. A. 1994. Comparison of sweep-net and pitfall trap samples of moorland Hemiptera: evidence for vertical stratification within vegetation. *Entomologist* **113**: 70–81.
- Denton, J. S. 1997. Recent records of rare and local Hemiptera in Surrey and North Hampshire. *Entomologist's Monthly Magazine* **133**: 79–80.
- Denton, J. S. 1998. Rare and notable Hemiptera in southern England, 1995–97. *Entomologist's Monthly Magazine* **134**: 265–266.
- Denton, J. S. 2001. Some noteworthy records of Hemiptera from England. *Entomologist's Monthly Magazine* **137**: 231–232.
- Eyre, M. D. 1998. Invertebrates and the environment: a time for reassessment? *Antenna* **22**, 63–70.
- Eyre, M. D. & Luff, M. L. 2003. The distribution of epigeal beetle (Coleoptera) assemblages on the north-east England coast. *Journal of Coastal Research*, in press.
- Eyre, M. D., Luff, M. L. & Lott, D. A. 1998. Rare and notable beetle species records from Scotland from survey work with pitfall traps, 1992–1996. *Coleopterist* **7**: 81–90.
- Eyre, M. D., Luff, M. L. & Lott, D. A. 2000. Records of rare and notable beetle species from riverine sediments in Scotland and northern England. *Coleopterist* **9**: 25–38.
- Eyre, M. D., Luff, M. L. & Phillips, D. A. 2001a. The ground beetles (Coleoptera, Carabidae) of exposed riverine sediments in Scotland and northern England. *Biodiversity and Conservation* **10**: 403–426.
- Eyre, M. D., Luff, M. L. & Woodward, J. 2002. Rare and notable Coleoptera from post-industrial and urban sites in England. *Coleopterist* **11**, 91–101.
- Eyre, M. D., Luff, M. L. & Woodward, J. C. 2003. Habitat creation favouring invertebrates: an example from Allerton Bywater, urban West Yorkshire. *British Journal of Entomology and Natural History*, in press.
- Eyre, M. D., Woodward, J. C. & Luff, M. L. 2001b. The distribution of grassland Auchenorrhyncha assemblages (Homoptera: Cercopidae, Cicadellidae, Delphacidae) in northern England and Scotland. *Journal of Insect Conservation* **5**: 37–45.
- Hawes, C. & Stewart, A. J. A. 1997. Notes on the habitat preference of *Euscelis venosus* (KBM) (Hem., Auchenorrhyncha). *Entomologist's Monthly Magazine* **133**: 63–64.
- Horsfield, D. 1993. *Psammettix frigidus* (Boheman) (Hem., Cicadellidae) on Pen-y-Ghent, Yorkshire and Creag Meagaidh, Inverness-shire. *Entomologist's Monthly Magazine* **129**: 122.
- Jones, R. A. 2000. *Stictopleurus punctatonervosus* (Goeze, 1778) (Hem.: Rhopalidae) breeding in Middlesex. *Entomologist's Records & Journal of Variation* **112**: 267–268.
- Jones, R. A. 2001. Further records of *Nysius senecionis* (Schilling) in the London area. *British Journal of Entomology and Natural History* **14**: 28.
- Jones, R. A. & Hodge, P. J. 1999. Notes on the occurrence of the planthoppers *Reptalus panzeri* (L w) (Hemiptera: Cixiidae) and *Asiraca clavicornis* (Fab.) (Hemiptera: Delphacidae). *British Journal of Entomology and Natural History* **12**: 239–240.
- Kirby, P. 1992. A review of the scarce and threatened Hemiptera of Great Britain. *UK Nature Conservation* **2**: 1–267.
- Kirby, P. 1994. 1993 Annual exhibition – Hemiptera. *British Journal of Entomology and Natural History* **7**: 173–175.
- Kirby, P., Stewart, A. J. A. & Wilson, M. R. 2001. True bugs, leaf- and planthoppers, and their allies. pp. 262–299 in Hawksworth, D. L. (Ed.) *The Changing Wildlife of Great Britain and Ireland*. Taylor & Francis, London.

- Luff, M. L. 1996. Environmental assessments using ground beetles (Carabidae) and pitfall traps. pp. 42–47 in Eyre, M. D. (Ed.) *Environmental Monitoring, Surveillance and Conservation using Invertebrates*. EMS Publications, Newcastle upon Tyne.
- Nau, B. S. 1998. Further notes on range changes of Hemiptera–Heteroptera in Bedfordshire. *Entomologist's Monthly Magazine* **134**: 52.
- Stewart, A. J. A. 1999a. Twenty years of recording the distribution of Auchenorrhyncha in Britain and Ireland. *Reichenbachia* **33**: 207–214.
- Stewart, A. J. A. 1999b. 1998 Annual exhibition. Hemiptera. *British Journal of Entomology and Natural History* **12**: 179–180.
- Stewart, A. J. A. 2001. 2000 Annual exhibition. Hemiptera. *British Journal of Entomology and Natural History* **14**: 168–169.
- Stewart, A. J. A. 2002. 2001 Annual exhibition. Hemiptera. *British Journal of Entomology and Natural History* **15**: 180.
- Stewart, A. J. A. & Wright, A. F. 1995. A new inexpensive suction apparatus for sampling arthropods in grassland. *Ecological Entomology* **20**: 98–102.

Appendix The grid reference, vice-county number and year(s) sampled of the sites mentioned in the text.

Site	Grid reference	Vice-county	Year
Cricklewood 1	TQ2287	21	2001, 2002
Cricklewood 2	TQ2386	21	2001, 2002
Sharlston	SE3820	63	1999
Allerton Bywater	SE4227	63	1998
Coatham	NZ5725	62	1995
Crawcrook	NZ1263	66	1996
Ryton	NZ1465	66	2002
Stargate	NZ1663	66	1996
Marley Hill 1	NZ1956	66	1995
Marley Hill 2	NZ1957	66	1995
Greatham Creek 1	NZ5025	66	1995
Greatham Creek 2	NZ5125	66	1996
North Gare Sands	NZ5327	66	1996
Seaton Sands	NZ5328	66	1996
Beltingham	NY7864	67	1996
Redesdale 1	NY8294	67	1990
Redesdale 2	NY8394	67	1990
North/South Tyne confluence	NY9165	67	1995
Grasslees Wood	NY9597	67	1996
Dilstonhaugh	NY9764	67	1995
Prudhoe 1	NZ0963	67	1994
Prudhoe 2	NZ0964	67	1994
Prudhoe 3	NZ1064	67	1994
Close House 1	NZ1265	67	1995
Close House 2	NZ1365	67	1995
Throckley	NZ1567	67	1996
Prestwick Carr 1	NZ1873	67	2002
Prestwick Carr 2	NZ1973	67	2002
Cockle Park	NZ2091	67	1996
Weetslade	NZ2572	67	1996
Druridge Bay	NZ2894	67	1996
Alnmouth	NU2409	67	1996

Appendix (*Continued*)

Site	Grid reference	Vice-county	Year
St Cuthbert's	NT8642	68	1996
Langholm–Newcastleton SSSI 1	NY3896	80	1995
Langholm–Newcastleton SSSI 2	NY4086	80	1995
Langholm–Newcastleton SSSI 3	NY4191	80	1995
Langholm–Newcastleton SSSI 4	NY4291	80	1995
Horsburgh Ford	NT3039	78	1996
Ale Water	NT4620	80	1997
River Tweed/Ettrick Water confluence	NT4932	81	1996
Mertoun	NT6231	81	1996
Auldgarth	NX9186	73	1997
Craigash	NS5676	86	2000
Strathcarron	NG9443	105	1996
Coulags	NG9744	105	1997
Achnashellach	NH0148	105	1997
Incheril	NH0361	105	1997
Glen Carron	NH0852	105	1996
River Feshie	NH8401	96	1997
River Dulnain	NH8620	95	1997
Aviemore	NH8911	95	1996
Tulcan Lodge	NJ1335	95	1996
Fochabers	NJ3358	95	1996
near Newtonmore	NN7097	96	1996

SHORT COMMUNICATIONS

The horsefly *Atylotus rusticus* (L.) in the Central Weald.—On 4 August 2003 a male of this horsefly was taken in the walled garden at Groombridge Place (TQ533376). At about mid-day, clumps of blue *Eryngium* flowers attracted lots of hoverflies and aculeates, plus this single horsefly. Whilst Groombridge is in Sussex, the location is just inside Kent.

Atylotus rusticus is a very rare species, since c. 1850 only known from the Lewes and Pevensey Levels in East Sussex, from which there are fairly recent records (Stubbs & Drake, 2001; *British Soldierflies and their allies*, BENHS). Groombridge is distant from acknowledged good quality grazing levels, suggesting that hidden away there are some worthwhile parts of the upper River Medway flood plain and its tributaries.

Hopefully dipterists and coleopterists will be encouraged to investigate the further potential for aquatic and semi-aquatic species in this area.—A. STUBBS, 181 Broadway, Peterborough, Cambridgeshire PE1 4DS.